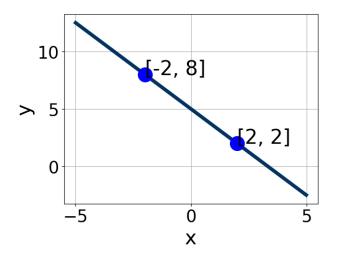
1. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-12x+16) = -11(-18x+10)$$

- A. $x \in [-1.11, 0.07]$
- B. $x \in [1.75, 2.12]$
- C. $x \in [0.51, 1.13]$
- D. $x \in [-2.42, -1.94]$
- E. There are no real solutions.
- 2. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [2.19, 3.42], B \in [-2.33, -1.88], \text{ and } C \in [-10, -7]$
- B. $A \in [-3.05, -2.74], B \in [-2.33, -1.88], \text{ and } C \in [-10, -7]$
- C. $A \in [1.38, 1.84], B \in [-1.72, -0.83], \text{ and } C \in [-8, -1]$
- D. $A \in [1.38, 1.84], B \in [0.74, 1.51], and C \in [0, 8]$
- E. $A \in [2.19, 3.42], B \in [1.77, 2.43], \text{ and } C \in [10, 12]$
- 3. Solve the equation below. Then, choose the interval that contains the 8497-6012 Summer C 2021

solution.

$$-8(-7x - 19) = -4(-14x + 9)$$

A.
$$x \in [-0.3, 0.5]$$

B.
$$x \in [-1.4, -0.4]$$

C.
$$x \in [-0.3, 0.5]$$

D.
$$x \in [-0.3, 0.5]$$

- E. There are no real solutions.
- 4. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-7x-4}{6} - \frac{-3x-9}{2} = \frac{-9x-5}{8}$$

A.
$$x \in [-8.7, -6.2]$$

B.
$$x \in [-3.8, -1.8]$$

C.
$$x \in [1.8, 3.5]$$

D.
$$x \in [-1.1, -0.6]$$

- E. There are no real solutions.
- 5. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(2,5)$$
 and $(-2,10)$

A.
$$m \in [-1.7, -0.9]$$
 $b \in [7.2, 8.2]$

B.
$$m \in [-1.7, -0.9]$$
 $b \in [2.1, 5.2]$

C.
$$m \in [-1.7, -0.9]$$
 $b \in [10, 12.1]$

D.
$$m \in [-1.7, -0.9]$$
 $b \in [-10, -6]$

E.
$$m \in [-0.4, 2.5]$$
 $b \in [12.3, 16.7]$

Progress Quiz 5

Version C

6. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 3x - 7y = 13 and passing through the point (-5, 6).

A.
$$m \in [-0.11, 2.33]$$
 $b \in [11, 15]$

B.
$$m \in [-0.11, 2.33]$$
 $b \in [7.14, 10.14]$

C.
$$m \in [2.01, 2.58]$$
 $b \in [7.14, 10.14]$

D.
$$m \in [-0.11, 2.33]$$
 $b \in [-12.14, -6.14]$

E.
$$m \in [-0.52, 0.19]$$
 $b \in [-3.14, 5.86]$

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{9x+7}{6} - \frac{-3x+4}{5} = \frac{6x+5}{3}$$

A.
$$x \in [-0.78, 4.22]$$

B.
$$x \in [12, 15]$$

C.
$$x \in [-3, -2]$$

D.
$$x \in [19, 26]$$

- E. There are no real solutions.
- 8. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-4, -3)$$
 and $(-11, -9)$

A.
$$m \in [-2.37, 0.6]$$
 $b \in [-20.1, -18]$

B.
$$m \in [0.58, 2.01]$$
 $b \in [-1.51, -0.35]$

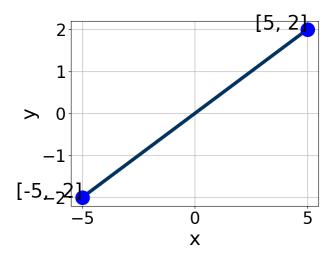
C.
$$m \in [0.58, 2.01]$$
 $b \in [1.45, 2.02]$

D.
$$m \in [0.58, 2.01]$$
 $b \in [0.67, 1.58]$

Progress Quiz 5

E.
$$m \in [0.58, 2.01]$$
 $b \in [-0.22, 0.91]$

9. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-1.2, 0.4], B \in [0.08, 1.32], \text{ and } C \in [-1, 5]$
- B. $A \in [1.8, 3.9], B \in [-5.9, -3.95], \text{ and } C \in [-1, 5]$
- C. $A \in [1.8, 3.9], B \in [3.04, 5.46], \text{ and } C \in [-1, 5]$
- D. $A \in [-1.2, 0.4], B \in [-1.68, -0.26], \text{ and } C \in [-1, 5]$
- E. $A \in [-2.8, -0.5], B \in [3.04, 5.46], \text{ and } C \in [-1, 5]$
- 10. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 3x + 5y = 8 and passing through the point (9, -7).

- A. $m \in [-2.89, -0.85]$ $b \in [-4.4, -0.3]$
- B. $m \in [-1.24, -0.43]$ $b \in [-4.4, -0.3]$
- C. $m \in [-1.24, -0.43]$ $b \in [0.6, 3.5]$
- D. $m \in [-1.24, -0.43]$ $b \in [-16.6, -15.7]$
- E. $m \in [-0.11, 1.28]$ $b \in [-12.5, -11.9]$